DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-013244 Address: 333 Burma Road **Date Inspected:** 21-Mar-2010

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: Zhao Chen Sun **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A Yes N/A N/A **Electrode to specification:** No **Weld Procedures Followed:** Yes No N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No **Delayed / Cancelled:** Yes No N/A

34-0006 **Bridge No: Component:** Tower Trial Assembly

Summary of Items Observed:

On this day CALTRANS OSM Quality Assurance (QA) Inspector Shailesh Gaikwad was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

TOWER TRIAL ASSEMBLY:

This QA Inspector performed Randomly Visual Inspection of the area previously tested and accepted by ZPMC Quality Control personnel. The member is identified as North Tower Lift 1, Grating Bracket. The weld designations reviewed are as follows.

GGSA-6PLAN-18M-16-(1~6)-N. GGSA-16PLAN-33M-1~10-(1~6)-N GGSA-16PLAN-33M-11-(1~6)-N-

Not ready. (Not welded at site)

GGSA-18PLAN-33M-1~11-(1~6)-N. GGSA-20PLAN-38M-1~10-(1~6)-N.

GGSA-22PLAN-38M-1~10-(1~6)-N

GGSA-24PLAN-43M-1~8-(1~6)-N GGSA-26PLAN-43M-1~8-(1~6)-N GGSA-28PLAN-47.

6M-1~9-(1~6)-N

GGSA-30PLAN-47.6M-1~9-(1~6)-N

NDT Notification No-005395

This QA Inspector performed Randomly Visual Inspection and Magnetic Particle Testing (MT) of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated

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a TL-6028 (MT) report for this date. The member is identified as North Tower Lift 1, Grating Bracket. The weld designations reviewed are as follows.

GGSA-2PLAN-15M-1~15-(1~6)-N

NDT Notification No-005395

WEST TOWER LIFT 1

This QA Inspector observed ZPMC qualified welding personnel identified as 205649. Perform Flux Core Arc Welding (FCAW) on West Tower lift 1 skin E inside, bearing plate. Joint identified as WSD1-SA225F/H-11, ZPMC QC Identified as Liu Zhi, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2333-Tc-P4-F. For more information see below attached photo.

This QA Inspector observed ZPMC qualified welding personnel identified as 067877. Perform Flux Core Arc Welding (FCAW) on West Tower lift 1 skin C outside, bearing stiffener. Joint identified as WSD1-SA294F/G-33, ZPMC QC Identified as Liu Zhi, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2333-Tc-P4-F.

EAST TOWER LIFT 1

This QA Inspector observed ZPMC qualified welding personnel identified as 059585, 040713. Perform Flux Core Arc Welding (FCAW) on East Tower lift 1 skin C outside, bearing stiffener. Joint identified as ESD1-SA294F/H-33, 69. ZPMC CWI Identified as Ye Yang Jun. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2333-Tc-P4-F.

This QA Inspector observed ZPMC qualified welding personnel identified as 040713, Perform Flux Core Arc Welding (FCAW) on East Tower lift 1 skin C outside, bearing stiffener. Joint identified as ESD1-SA294F/G-49. ZPMC CWI Identified as Ye Yang Jun. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2333-Tc-P4-F.

This QA Inspector observed ZPMC qualified welding personnel identified as 066482. Perform Flux Core Arc Welding (FCAW) on East Tower lift 1 skin D inside, bearing plate. Joint identified as ESD1-SA296B/E-29, ZPMC CWI Identified as Ye Yang Jun. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2333-Tc-P4-F.

SOUTH TOWER LIFT 1

This QA Inspector observed ZPMC qualified welding personnel identified as 067034. Perform Flux Core Arc Welding (FCAW) on South Tower lift 1 skin C outside, bearing plate. Joint identified as SSD1-SA17-F/G-42, 66. ZPMC CWI Identified as Ye Yang Jun, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2333-Tc-P4-F.

NORTH TOWER LIFT 1

This QA Inspector observed ZPMC qualified welding personnel identified as 204868. Perform Flux Core Arc Welding (FCAW) on North Tower lift 1 skin C outside, bearing plate. Joint identified as NSD1-SA17-F/G-60. ZPMC CWI Identified as Ye Yang Jun, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2333-Tc-P4-F.

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This QA Inspector observed ZPMC qualified welding personnel identified as 066683. Perform Flux Core Arc Welding (FCAW) on North Tower lift 1 skin E inside, bearing plate. Joint identified as NSD1-SA76-F/H-21, 13. ZPMC CWI Identified as Ye Yang Jun, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2333-Tc-P4-F. For more information see below attached photo.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.





Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Skyler Guest phone: 15000422360, who represents the Office of Structural Materials for your project.

| Inspected By: | Gaikwad,Shailesh | Quality Assurance Inspector |
|---------------|------------------|-----------------------------|
| Reviewed By: | Clifford,William | QA Reviewer |